

Remarks

Claims 1-38 were originally filed. Claims 1, 4, and 38 were previously amended and Claim 7 previously canceled.

Independent Claims 1 and 38 are being further amended herein to expressly recite that the hybrid organic/inorganic reactive species is selected from reactive silanes, hydrolysates of reactive silanes, and combinations thereof (basis therefor being found, for example, in Paragraph [0046] of the instant patent application publication (US2005/0124712 A1)) and to expressly clarify that Applicants' specification categorizes epoxy-functional silicones as being organic reactive species (basis therefor being found, for example, in Paragraph [0041], which falls under the section heading of Paragraph [0032]). Also, per the Examiner's suggestion, the proviso that had been added to Claim 38 in a previous Amendment is being moved to the end of Claim 38, in order to further clarify that it is not an optional proviso.

Claim 4 is being amended herein for clarification purposes (in view of all of the amendments to Claim 1 to date) to specifically require the presence of inorganic particles in the composition by deleting the word "optionally." Claim 8 is being editorially amended (and its dependency also changed, in view of the amendment of Claim 4) to clarify that the substantially inorganic composition can further comprise the listed materials to increase the inorganic content of the composition (basis therefor being found, for example, in Paragraph [0047]).

Rejection Under 35 U.S.C. Section 102

Claims 1-6, 8-27, and 36-38 were rejected under Section 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/ 0012872 (Fleming et al., hereinafter referred to as Fleming). This rejection is respectfully traversed for the following reasons.

Applicants have previously addressed this rejection in remarks that are incorporated herein by reference, but the Examiner has maintained the 102 rejection, based upon Fleming's disclosure of epoxy-functional silicones in Paragraphs [0080] and [0082]. Such reactive species are similarly described by Applicants, however, (at page 8, line 21, and page 9, lines 18-22) in the section of Applicants' specification entitled "(i) Organic Reactive Species" (which begins at page 6, line 8, and ends at page 10, line 16).

In order to advance prosecution, Applicants have amended independent Claims 1 and 38 to expressly state that epoxy-functional silicones are considered to be organic reactive species. Thus, the proviso of Applicants' claims that pertains to organic reactive species ("with the proviso that when said reactive species is organic the composition further comprises a said hybrid organic/inorganic reactive species and/or a plurality of inorganic particles" in Claim 1) clearly applies to epoxy-functional silicones and requires the presence of either inorganic particles or a hybrid organic/inorganic reactive species in addition to the epoxy-functional silicone.

Applicants have also amended their claims to specify that the hybrid organic/inorganic reactive species is selected from silane compounds having at least one polymerizable organic group, hydrolysates of such silane compounds, and combinations thereof. Thus, Applicants' amended claims require the presence of either inorganic particles or reactive silanes (or both) whenever epoxy-functional silicones are used as the reactive species.

In contrast, Fleming does not appear to teach or suggest the use of epoxy-functional silicones or other organic reactive species in combination with reactive silanes and/or inorganic particles. Since Fleming neither teaches nor suggests the use (or the benefits) of the substantially inorganic compositions specified by Applicants' amended claims, Applicants respectfully submit that their claimed process is indeed patentable over Fleming and respectfully request that the rejection under Section 102 be withdrawn.

Rejection Under 35 U.S.C. Section 103

Claims 28-35 were rejected under Section 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/ 0012872 (Fleming et al., hereinafter referred to as Fleming) in view of U.S. Patent No. 4,406,992 (Kurtz et al., hereinafter referred to as Kurtz). This rejection is respectfully traversed for the following reasons.

Kurtz describes a semiconductor pressure transducer or other product employing layers of single crystal silicon. A single crystal silicon substrate is said to have a line grating formed on a surface, and a layer of dielectric is said to be thermally grown on the surface to replicate the line grating on an opposite surface of the dielectric. A layer of silicon is said to be deposited on the opposite surface. The layer of silicon is said to be of single crystal form due to the presence of the grating structure. The method employed is said to thus enable one to eliminate any

intermediate glass bonding layer as well to eliminate polycrystalline structure. The structure and methods are said to result in extremely reliable apparatus capable of high temperature operation while possessing improved mechanical strength. (See Title, Abstract, and Brief Description of the Preferred Embodiment.)

The Examiner has relied upon Kurtz for its description of silicon deposition and has asserted that the subject matter of Claims 28-35 is obvious in view of the combination of Fleming and Kurtz. As explained above, however, Fleming fails to teach or suggest at least the use of Applicants' substantially inorganic photoreactive composition, and thus, even with the addition of Kurtz' silicon deposition, the combination of Fleming and Kurtz does not provide Applicants' claimed process. Applicants therefore respectfully submit that their claimed process is indeed patentable over this combination of references and respectfully request withdrawal of the rejection under Section 103.

Concluding Remarks

Reconsideration and allowance of Applicants' claims are respectfully requested. Applicants also request that the Examiner telephone the undersigned attorney, if the Examiner has any questions regarding this Amendment or has any further suggestions to advance prosecution and/or allowance.

Respectfully submitted,

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Date

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